

It will be apparent that other designs for the narrow slits or other light transmitting openings could be utilized, and one experienced in fitting such lenses could determine the most likely configuration by studying the eye characteristics. It is anticipated, however, that the best designs will be determined through the use of means permitting testing of a patient with the respective configurations.

In FIG. 10, the opaque areas are provided by means of concentric rings 34, 36 and 38 which are interrupted by annular light transmitting openings 40 and 42. Although with this design, the openings 40 and 42 do not intersect the central opening 13, it has been found that the advantages of the invention can still be achieved. Thus, the light transmitting openings operate as one lens system and converge the light at one point. Decentering does not eliminate vision, and adequate illumination is provided.

The various lens designs all eliminate problems characteristic of pinhole contact lenses. Where a single pinhole is employed, an intolerable situation is encountered from the standpoint of peripheral field capabilities and illumination. In addition, the wearer is effectively blind when the lens is decentered due to blinking or for any other reason. Where attempts have been made to solve this by providing multiple pinholes, diplopia (double vision) will occur with two pinholes and polyopia (multiple vision) will occur with multiple pinholes.

The simplicity of the arrangements described when compared with conventional bifocal lenses will be apparent. Techniques employed in the preparation of cosmetic lenses can be readily adapted for the preparation of the continuous focal lenses of this invention. The lenses do not require any special training for the wearer since the wearer need not "hunt" for bifocal segments when shifting to a different view. The natural reading position of the head can be used.

The lenses can be designed whereby the particular visual condition of a particular wearer can be accommodated. It is also important to note that the lenses will have a natural appearance since the lenses can be colored without difficulty. In this respect, different eye

colors can be prescribed where this is desired for cosmetic reasons.

An additional major advantage of the lenses relates to the ease of fitting. In many cases, conventional lenses, particularly bifocals, are extremely difficult to fit since shifting on the eye is necessary for proper vision. It has been found that fitting is not nearly as critical with continuous focal lenses of the type contemplated by this invention since only normal centering is necessary.

It will be understood that various changes and modifications may be made in the above described lenses which provide the characteristics of this invention.

That which is claimed is:

1. In a contact lens structure having a concaveconvex shape with the concave surface being adapted to adhere to and float on the cornea and having a curvature substantially conforming to the cornea, at least that portion of the lens designed to be located over the pupil of the wearer when the lens is positioned on the eye being prescription ground to provide a distance vision correction for the wearer, an opaque region located in the central portion of the lens and defining an essentially circular pattern, the diameter of the opaque region being at least sufficient to provide for covering of at least said portion of the lens designed to be located over the pupil of the wearer, and a substantially unrestricted light transmitting opening defined in the center of said opaque region, the improvement comprising a plurality of light transmitting openings communicating with said central opening and extending outwardly from said central opening, said light transmitting openings being in the form of narrow slits extending radially from the central opening to thereby provide a plurality of wedge-shaped opaque portions, the respective junctures of the slits with said central opening being substantially equally spaced apart whereby said wedge-shaped portions are of substantially the same shape, and wherein the width of said slits is substantially smaller than the diameter of said central opening.

2. A construction in accordance with claim 1 wherein said slits have a width of at least 0.05 mm.

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